



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,882	07/19/2005	Yin Hao	A3-267 US	8357
7590	06/15/2006		EXAMINER PATEL, HARSHAD C	
Robert J Zeitler Molex Incorporated 2222 Wellington Court Lisle, IL 60532			ART UNIT	PAPER NUMBER
			2839	

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/542,882

Applicant(s)

HAO, YIN

Examiner

Harshad C. Patel

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/19/06 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

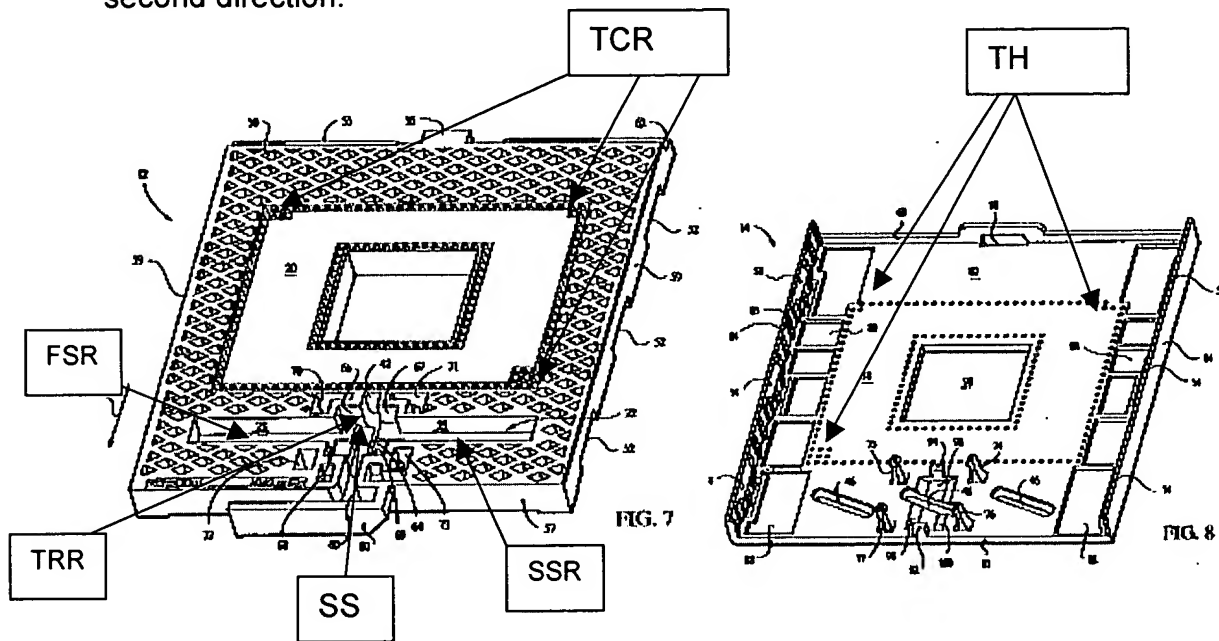
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

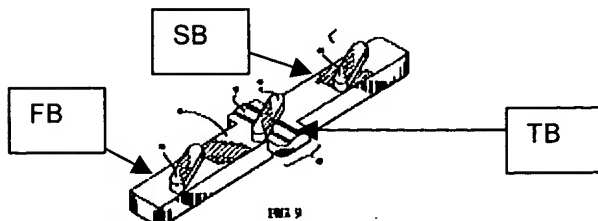
Claims 1 - 11 and 13 - 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Trout et al. (US 6,338,639).

Regarding claim 1, Trout et al., figs 1 - 12, discloses, a ZIF electrical connector, comprising: an insulative housing 12 having a cover 14 slidably assembling onto a base, the base defining a plurality of terminal-receiving cavities TRC (fig 7), the cover 14 moving between a first position and a second position and along a first direction and defining a plurality of through holes TH corresponding to the terminal-receiving cavities, the base defining a recess portion 23 partly slant with the first direction; a plurality of conductive terminals received in the terminal-receiving cavities; a slider 24 moving in the recess portion and having a body and part of the body 44 intervening with the cover; and a drive 32 means extending into the insulative housing from side of the insulative housing crossing the first direction and contacting with the body of the slider, the drive means driving the body to move along a second direction slant the first direction and further drive the cover to displace along the first direction between a first position and a second position.

Regarding claim 2, Trout et al., figs 1 - 12, discloses, a ZIF electrical connector, wherein the recess portion has a first slant recess FSR , a second slant recess SSR and a transverse recess TRR connecting with the first and second slant recesses, and the slope (with slop 0) of the first and second slant recess is all same with that of the second direction.



Regarding claim 3, Trout et al., figs 1 - 12, discloses, a ZIF electrical connector, wherein the body of the slider has a first body FB, a second body SB and a transverse body TB connecting with the first body and the second body, the First body is enough received in the first slant recess, the second body is enough received in the second slant recess and the transverse body is enough received in the transverse recess.



Regarding claim 4, Trout et al., figs 1 - 12, discloses, a ZIF electrical connector, wherein the drive means is a pole 30 and has an operating portion 34 defined at side of the insulative housing crossing the first direction and a cam member 38 contacting with the transverse body, when the operating portion pivots, the operating portion drives the cam member to turn.

Regarding claim 5, Trout et al., figs 1 - 12, discloses, a ZIF electrical connector, wherein the transverse recess is defined along the direction vertical to the first direction.

Regarding claim 6, Trout et al., figs 1 - 12, discloses, a ZIF electrical connector, wherein the slider 24 defines at least an elongated protrusion⁴⁴ on a surface thereof near the cover and a front surface of the long axis of the elongated protrusion is vertical to the first direction and the cover defines an elongated hole 46 corresponding the protrusion of the slider to receive protrusion.

Regarding claim 7, Trout et al., figs 1 - 12, discloses, a ZIF electrical connector, wherein the protrusions are respectively formed on the first body, the second body and the Transverse body and the cover respectively defines an elongated hole corresponding to each protrusion of the slider.

Regarding claim 8, Trout et al., figs 1 - 12, discloses, a ZIF electrical connector, wherein the protrusion is elliptic and its long-axis is vertical to the first direction and the elongated hole is elliptic and its long-axis is vertical to the first direction.

Regarding claim 9, Trout et al., figs 1 - 12, discloses, a ZIF electrical connector, wherein the protrusion engages with the elongated hole in the first direction.

Regarding claim 10, Trout et al., figs 1 - 12, discloses, a ZIF electrical connector, wherein the base 12 extends a receiving base 80 from side of the drive means extending in the insulative housing and the receiving base defines an elongate groove 40 vertical to the first direction to receive the operating portion of the drive means.

Regarding claim 11, Trout et al., figs 1 - 12, discloses, a ZIF electrical connector, wherein the receiving base 80 connects connector the transverse recess through a securing slot 42, SS along the first direction and the drive means extends in the insulative housing along the securing slot.

Regarding claim 13, Trout et al., figs 1 - 12, discloses, a ZIF electrical connector, wherein the transverse body TB depresses a U-shaped groove along a short axis thereof near the base to receive the cam member of the drive means.

Regarding claim 14, Trout et al., figs 1 - 12, discloses, a ZIF electrical connector further comprises a wearable member U-shaped 26 and made of metal and received in the U-shaped groove of the transverse body, each side of the U-shaped groove defines a plurality of securing holes 106 - 108, and the U-shaped sidewalls of the wearable member respectively integrated extend a plurality of securing legs 120 -123 (fig 11) corresponding to insert in the securing holes to fasten the wearable member.

Regarding claim 15, Trout et al., figs 1 - 12, discloses, a ZIF electrical connector, wherein the base defines a plurality of orientating holes 70 - 73 (fig 7), each orientating hole transverse defies a block and the block is not close the orientating hole, the face of the cover near the base respectively downward defines an orientating peg 74 - 77 (fig 8) corresponding to the orientating hole of the base, free end of the orientating peg is a

Art Unit: 2839

hook, each orientating peg is received in the corresponding orientating hole and each hook of the orientating peg lock the block of the orientating hole.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Trout et al. (US 6,338,639) in view of Howell et al. (US 6, 544,065).

Regarding claim 12, Trout et al., figs 1 - 12, discloses a ZIF electrical connect with a base 12.

However, Trout et al. specifically fails to disclose the base respectively defines a post at two opposite comers of side of the drive mean extending in the insulative housing.

Howell et al., fig 1 discloses, the base defines a post 18 at two opposite comers of side of the drive mean 30 extending in the insulative housing.

It would have been obvious to one of ordinary skill in the art at the time the invention is made to a post at two opposite comers of side of the drive mean extending in the insulative housing as suggested by Howell et al to the ZIF connector of Trout et al.

Art Unit: 2839

The motivation for making the modification is to have better securing the handle of the drive means under lock condition in respective direction.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harshad C. Patel whose telephone number is 571 272 8289. The examiner can normally be reached on M - F ; 8.00 AM TO 5.00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, T. C. Patel can be reached on 571 272 2098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner
HCP
6/7/06


TULSIDAS C. PATEL
SUPERVISORY PATENT EXAMINER